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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,801	12/08/2003	Tatsuro Nagahara	FN4104US-CIP	8923
75	90 01/24/2006		EXAMINER	
Alan P. Kass			LEE, S	SIN J
Clariant Corpor			ADTIBUT	DARED MINARED
70 Meister Avenue			ART UNIT	PAPER NUMBER
Somerville, NJ 08876			1752	
			DATE MAILED: 01/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	10/728,801 Examiner	NAGAHARA ET AL.				
•		Art Unit				
- The MAILING DATE of this communication ap	Sin J. Lee	1752				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period  Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be tin  will apply and will expire SIX (6) MONTHS from  a. cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. & 133)				
Status						
1) Responsive to communication(s) filed on <u>07 N</u>	lovember 2005.					
_						
3) Since this application is in condition for allowa	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under i	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)  Claim(s) 4-6,8-15 and 17-19 is/are pending in 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) 4-6,8-15 and 17-19 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration. or election requirement. er. are: a)⊠ accepted or b)□ objec					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)).	ion No. <u>09/806,852</u> . ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

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## **DETAILED ACTION**

1. In view of applicants' argument, previous 102(b) rejection on claims 4-6, 8-15 and 17-19 over Nagahara et al (EP'435) is hereby withdrawn.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claims 4-6, 8-15 and 17-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Nagahara et al (US 2003/0113657 A1).

Nagahara et al is prior art as of its publication date (June 19, 2003) under 102(a) since effective filing date of present application is December 8, 2003, not June 18, 2001

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on which the parent application 09/806,852 was filed (present claims include subject matters not supported in the parent application 09/806,852).

Claims 6 of Nagahara teaches a photosensitive polysilazane composition comprising a polysilsesquiazane having a number average molecular weight of 100 to 100,000 and containing a basic constituent unit of –[SiR<sup>6</sup>(NR<sup>7</sup>)<sub>1.5</sub>]-, in which R<sup>6</sup> represents a C<sub>1-3</sub> alkyl group or a phenyl group and R<sup>7</sup> represents a H atom, a C<sub>1-3</sub> alkyl group or a phenyl group, and a photoacid generator. Based on this teaching, one skilled in the art would immediately envisage the R<sup>6</sup> to be a methyl group and the R<sup>7</sup> to be a H atom. Also, claim 14 of Nagahara teaches a method forming a patterned interlayer dielectric, which comprises forming a coating film of the radiation sensitive polysilsesquiazane composition, patternwise irradiating the coating film, dissolving and removing the irradiated part of the coating film, and leaving the residual patterned coating film in the ambient atmosphere or burning the coating film.

As photoacid generator, Nagahara teaches peroxides (such as 3,3',4,4'-tetra(t-butylperoxycarbonyl)benzophenone shown in [0163]) and nitrobenzyl ester (see [0083]). Therefore, Nagahara teaches present inventions of claims 4-6 and 11-15.

Nagahara also teaches the use of a sensitizing dye such as coumarin in [0033] and the use of an oxidization catalyst such as palladium propionate in [0035].

Therefore, Nagahara teaches present inventions of claims 8-10 and 17-19.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333.

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The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. J. L.

S. Lee

January 22, 2006

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